

EDUCATION IN SEXUAL
PHYSIOLOGY^{AND} HYGIENE

PHILIP ZENNER, M.D.

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EDUCATION IN SEXUAL
PHYSIOLOGY AND HYGIENE

EDUCATION IN SEXUAL PHYSIOLOGY AND HYGIENE

A PHYSICIAN'S MESSAGE

BY

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PREFACE

THIS book is intended as a message from a physician to the people. Its purpose is prevention of disease. It is true prevention in this instance is only in a limited direction, but it is of incalculable value, for it concerns diseases which most gravely affect the life of man and of society. They are social disease and many cases of nervous and mental disease. The means of prevention are modes of instruction that tend to make a pure mind, and the imparting of knowledge that helps to safeguard the individual.

The first three chapters of the book give talks of the author to school children and college boys. They are given as demonstrations of what has been and can be done with the hope of

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awaking a public interest and stimulating others to like efforts.

But these talks are far from the best instruction that could be given. Farther on in the book are discussed other and better modes of instruction.

Members of the medical profession have repeatedly called attention to the great harm done by the prevailing false system of education which ignores the laws of sex.

The highest aim of this book is to help create a public sentiment which will demand teaching in sexual physiology and hygiene. But this is not enough. It is but a wholesome instinct which dreads this teaching unless it be properly done. So, if there be a public demand for such teaching, it should demand, also, that the teacher and the teaching be the best.

AN EXPERIMENT AND ITS RESULTS

THE purpose of this article is to tell something of what was done in a Cincinnati school, and to report my own part in this experiment, if I should call it that, for the teachers believe that the result of the teaching was unmitigated good. The school in question is in a poor district of the city, in which live black and white, a district where the presence of factory and saloon, as well as family environment, did not appear most favorable for the moral development of youth.

A teacher in this school, a noble-hearted woman, who knows how to win the confidence of her pupils, and to read deeply into their hearts, re-

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quested the Superintendent to have a lady physician speak to her girls on some subjects that would help them morally and physically. The Superintendent spoke to me, and I mentioned the subject to Dr. Nora Crotty, a young lady who is not only a capable physician, but who also had been a school-teacher before she studied medicine. She was much interested, and, after we had considered ways and means, gave to the girls some fifteen talks of fifteen or twenty minutes each, on the following subjects: the ideal woman, personal cleanliness, character, heredity, anatomy of the pelvic organs, menses, reproduction in plant and animal, infectious diseases, a pure mind, and womanhood and motherhood.

The girls Dr. Crotty addressed were

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those of the two highest grades in the school, in which the children ranged from twelve to sixteen years of age. The presence of a large number of older children was due to the character of the neighborhood. These children were fortunate in having as teachers a lady and gentleman who were efficient teachers, and had the good of the children at heart.

After Dr. Crotty had given a few talks to the girls, the other teacher asked me if I would not speak to the boys on the same lines. Such a thought had been farthest from my mind, for it seemed to me that the spirit in which these boys would receive such a class talk would be productive of harm rather than good. Very likely there was behind this judgment a sense of cowardice, which

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I need not explain. I offered to speak to any or all of the boys privately, if the teacher would send them to me. He then requested me to address the class on any subject, so that the boys might come to feel acquainted with me, and be more willing to consult me. This led to my first, and later to the second, and then the third talk. At the time of the third talk the teacher said the boys had been begging him to have me "speak to them alone," as Dr. Crotty had been "speaking to the girls alone." With much misgiving I consented to do so, and, on this occasion speaking only to the boys (the other "talks" had been given to the girls and boys together), gave the fourth, the "sex talk," if that term may be applied to so mild a product. The four talks follow.

TALK I

HYGIENE

YOUR teacher requested me to speak to you about health matters, in order that you might keep, or improve, your own health. Physicians see so much sickness, and are brought into such close touch with bitter trouble, that they are glad to be enabled to do something to prevent disease.

Disease may be prevented by knowledge, care and self-control, that is, by knowing the causes of disease, being careful to avoid them, and exercising self-control, when the gratification of desire would produce disease.

The great factors which preserve health are sleep, pure air, good food,

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sufficient clothing and living moral lives.

We cannot do without sleep. If we have not enough we lose our health. Individuals differ in the amount needed, just as they do with food. You need nine hours or more. School children often rob themselves of sleep and mar their health by going to entertainments or the like.

Pure air is very necessary for health. It is now looked upon as the means of cure of that dread disease tuberculosis, or consumption. Such patients are sent to Colorado, Arizona, or like places, where they are outdoors always. We are now trying to accomplish the same thing in our own homes, through having the patient sleep on the porch or by the open window. Outdoor air is reasonably pure unless

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it is poisoned by smoke, by the products of factories, or the like. Indoor air is rendered impure by ourselves, through breathing and perspiring, and also by the lights that we burn. The Welsbach light does not poison the air as much as the ordinary gas jet. The electric light does not poison it any.

When the air becomes impure it causes discomfort, headache, or worse. If very bad it endangers life. The air is kept pure by opening the windows sufficiently. In winter it is well to open them at the top, so that the air may be warmed before falling upon us. The windows should often be thrown wide open, to flush out the room, and sweep from furniture and walls poisonous particles from our breath, which tend to cling to them.

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How dangerous air may become which is made impure by our breathing is shown by what is termed the Black Hole of Calcutta. In that city some hundred and fifty years ago 146 prisoners were driven at the point of the sword into a room scarcely twenty feet square and having only two small windows. The next morning only twenty-three prisoners were found alive. They were poisoned by the products of their own breathing.

I want to tell you something about the medical inspection of schools, or what physicians are doing for the health of school children. Firstly, they look to see whether any children in the schoolroom have a catching disease, such as diphtheria or scarlet fever, a sickness which soon spreads from the sick child to others in the

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room. They also watch that these children do not return to school so soon that the other children may catch the disease from them. Naturally the sick child does not like to be kept to himself, at least not longer than is necessary. But he should not be selfish, and should remember that the poison clings to him a while even after he feels well, and that he can easily be the cause of sickness or death to others.

A second object of the school physician's inspection is to examine for enlarged glands or adenoids, which may obstruct the breathing and make one mentally dull. They are easily removed by an operation. In a school for backward children in New York a large number had adenoids, and after they had been operated upon, im-

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proved so much in health and mind that they did more in school in six months than they had done in the previous two years.

The school physician also examines the eyes, for many children have headache or suffer in other ways, and are immediately relieved by wearing suitable glasses.

The reason I have been speaking of this is because the Cincinnati physicians have often found children with adenoids or eye defects, and have recommended suitable treatment, but nothing was done because of unwillingness of the child or neglect of the parent. This is a great mistake—a mistake to keep ill health or suffering, or retard one's progress at school—when a cure is so near at hand.

The condition of the mind is an im-

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portant factor in health and disease; that is, health is much influenced by how we feel and think. The most harmful influence of this kind is fear. Fear often causes illness, especially fear of disease often makes one sick. Very often a patient comes to a physician feeling ill, or actually ill, because he has been reading in medical advertisements descriptions of disease, which he applies to himself. These descriptions are written for the very purpose that he who reads should feel ill, and apply for treatment, and thus put money in the pocket of the advertiser.

I want to tell you something about medical advertisements which you probably do not know. Doctors who advertise in the papers—and the same is true of most medicines—do so only

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for the purpose of making money. They deceive the people. They are common cheats. I hope you will never read any medical advertisements, and never have to do with any advertising doctors. There is another reason why this is a matter of importance. Very often such reading and treating with such physicians leads to secret treatment, and secret fears and brooding in secret. Nothing is more harmful to health than this.

I want to say another word about secrecy. Do not admit it into your lives. It is harmful. Do not keep secrets from your parents or teachers. It is likely to lead to immorality, and that finally destroys health. On the other hand, being open in your thoughts and acts counts for pure hearts and perfect health.

TALK II

HABIT

OUR subject to-day is one of great importance to every one of you. It is habit. You all know something about habit. You all know what it is to have the habit of eating rapidly, of biting the nails, of getting angry at trifles; or the habit of envy, of quarreling, or of injustice at play. You know it means doing these things so often that it is hard not to do them. But habit consists not only in doing such undesirable things as I have just mentioned, but of almost everything we do, walking and talking and playing and all that. Habit consists of doing things over and over and over again,

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until they almost become a part of us. It grows out of the nature of our nervous system. As this is so important, I am going to try to make you understand it.

Every act, or thought, or feeling is due to some action of the brain. There are millions and millions of little cells in the brain, connected together by as many fibers or little bands, just as the cells of the telephone battery are connected by wires. Now, any act, or thought, or feeling is due to a certain number of these cells and fibers acting together.

For a given act it must always be exactly the same cells and the same fibers that act together, and you see it may be no easy task to pick out certain cells and fibers, when there is such a vast number to select from. I

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may compare it to picking out a path in a trackless forest, which, at first, may be very difficult indeed. But after it has been trod once, it comes more easily the second time; and after one has gone over it often, it comes so easily that he does not want to go any other way.

So it is with the brain action we are considering. The first time it may have been very difficult to pick out certain cells and fibers to work together. The second time it comes more easily, and finally so easily that the brain wants to work that way and no other, and a habit is formed.

Look at the habit of walking. The waddling child has great difficulty with its early steps; finally it walks easily, and, you know, we walk quite

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unconscious of the act. At the same time we may have been acquiring something awkward or ungraceful in our gait, which is also a habit and remains with us.

Talking is a habit gained in the same way, first difficult, then easy. Perhaps it comes more easily to some of you than your teachers like. And so of writing, and so on.

What is true of these common habits is true of nearly everything in life. Most of our thoughts are the result of habit. My own thoughts, as the result of long habit, are largely about sickness and how to cure or prevent it. It is because of thoughts of the prevention of sickness that I am speaking to you to-day. Your thoughts, again as the result of habit, are largely with your

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books, and your lessons, and your play.

Even character is due to habit. One is truthful, because he has formed the habit of speaking the truth. It is a part of his nature. One tells falsehoods because he has acquired that habit; and the more frequently he does so, the more difficult it is for him to tell the truth. So it is with being honest or dishonest, with being satisfied, of a contented nature, or dissatisfied, greedy, and the like. Self-control, which is the most necessary part of a strong character, is due to the habit one has formed of mastering himself. One has a weak character who has not acquired the habit of self-mastery.

I want to tell you something of the history of character formation. When

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we speak of the moral qualities of little children, we do not speak of character, but of instincts. From these instincts habits are formed and character is built.

The instincts of a child are partly pleasant, partly unpleasant traits. Among the unpleasant traits are cruelty—a child often likes to hurt its baby brother, to harm animals, and the like—and a tendency to lie and steal. If these instincts are given full play, if the child is permitted to be cruel, to lie, or steal, as he will, these instincts are likely to become fixed habits, and the child will have a bad character. This fact is well known, and, therefore, parents and teacher try to suppress these bad instincts, in which they usually succeed. But they are not always successful, and then

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these bad habits are converted into permanent traits of character.

This is more likely to occur in those who have weak minds, for they have less self-control. But it does occur in others, though the latter should know that they thus enter into a class with the weak-minded. Such a child continues to lie or steal, and this becomes a part of its character. It continues to be cruel, perhaps delights to inflict pain upon others, whereas the normal being abhors such actions. Teasing, which is so common, is the remains of such an instinct, though by no means so bad.

In order that you may more fully understand habit, I must add that some habits are formed very quickly. This is often true of the drink habit—that is, becoming addicted to intoxicating

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drinks. It is also true of other things that are immoral and destructive to health.

I wish you to fully understand this matter of habit, that it rules our lives, that we become slaves to habit, as it were. A great man said we should make habit our friend, and not our enemy. We should carefully watch ourselves that we do not fall into habits that harm us, for a single act may start a habit that will ruin a life. The French have a proverb, "It is the first step that counts." We should always see to it that our first step is in the right, and not in the wrong direction.

I want to tell you one more thing about habit, that is, how to break a bad habit, if one should be so unfortunate as to have acquired it. This may

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be a very difficult thing, but with resolution and effort it can be done.

Certain rules have been given to help us to accomplish this. The first thing to remember is, that habit has a very strong hold upon us, so that we must make a very great effort at the start, use all the strength we have, and try to get outside assistance.

It is common for one who tries to break the fearful hold drink has upon him to sign a public pledge. Thereby the sense of shame and honor helps to strengthen his resolution. It is said of a man who wished to break the drink habit that he published in the papers that he would give anybody fifty dollars who found him in a saloon. Perhaps some of these people might learn from a little schoolboy. This boy's mother urged him to drink some

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whisky. "No," he said, "and if you could see your liver as I saw one in school to-day you would not drink either."

I want to tell you about breaking another habit. This was the case of a boy about the age of most of you. Burglars had broken into the house some years before, and as a result he had fallen into the habit of great fear. When he was in bed he was full of fear, unless some one were in the room with him. This became a source of great suffering, not only to him, but also to the whole family, and they finally brought him to me.

I told him the way to conquer fear was to look the cause of it boldly in the face. Then I made these suggestions: At bedtime he should run into the cellar, a thing which he had a

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great fear of doing—he could, of course, conquer himself sufficiently to run there for a moment—then he was to plunge into a cold bath, and jump into bed determined to fall asleep at once. He did so, and has been altogether rid of his fears since.

If time permitted, I would like to speak of getting rid of other bad habits, such as lying, stealing, and being obstinate or willful. This last trait, obstinacy, not obeying, the stubborn determination to have one's way, is an exceedingly unfortunate one, and brings much unhappiness both to its possessor and to others.

Another rule to remember in the breaking of habits is that one must guard himself very carefully for a long time so that the habit is not resumed, for there will be a nagging

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desire to do so, which can only be conquered by strong resolution and great effort; and if one does fall back into the habit, it will be harder to break than ever.

There is still a third rule, perhaps the most important of all, that is, to find the opportunity of breaking the habit as soon as possible after one has thought of doing so. Nothing weakens the mind so much as making many resolves and doing nothing. To feel that one should do a thing, and then not do it, finally robs one of all power to act.

Now I wish you to apply all this to yourselves. I wish each one of you to remember that habits are sometimes formed quickly, that a single act may start a habit that will rule and ruin a life; and I wish each one of you to

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guard yourself against any such first act, in fact against any act of which you would not be willing to speak freely to your parents and teachers.

And it is not only your acts I would have you guard carefully, but also your thoughts, for some habits of thought are as harmful as acts. Try to suppress any thoughts you would be ashamed to tell to others.

If any of you have any habits that you think it would be well to break, or that are bad and you ought to break, I hope that what I am saying now will spur you on to break them at once. At the same time it would be well to speak to your parents or teachers or both, so that you will have the greater strength to break the habit, and will be the surer of not falling into it again.

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I have been speaking to you to-day because I have it in my heart to do you good, and because we all wish that you should grow up vigorous and healthy, and build up strong and good characters.

TALK III

ALCOHOL

I AM going to speak to you to-day about alcoholic drinks. It is a subject which you should understand, because more people are injured from the effects of alcohol than from almost any other one thing. And if you know about this you may be able not only to guard yourselves, but also to keep others from harm.

The chief alcoholic drinks in use here are whisky, wine and beer. Of these, whisky does much more harm than wine or beer. Cheap whisky is often impure liquor, which is most deadly of all.

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So much harm is done by alcoholic drinks, because they are so often used to excess. I am going to tell you of some—by no means all—of the harm thus done.

Firstly, it causes many of the diseases that destroy life, such as disease of the liver, kidneys, stomach and heart. Then it makes certain changes in the blood, so that when one gets a severe disease like pneumonia, or typhoid fever, one's chances of life are lessened; that is, people who drink are more likely to die of these diseases than those who do not drink.

But the worst effects of alcohol are on the brain. It causes many brain diseases, the worst of which is insanity. About one-fifth of those in the insane asylums have been made insane through drinking too much.

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But even if it does not produce insanity, it affects people's minds in changing their dispositions, so that they act as they would not otherwise do. They do not work, neglect their families, and get poor. Most of the men who do not support their families and are very poor are so because of drink. They often abuse their families and strike their wives and children.

In a Southern city a great many men were brought to the police court every week for beating their wives. Then all the saloons in the city were closed, and immediately thereafter there was scarcely any wife-beating.

A large part of the crimes everywhere is due to drink. This is true of the thousands who are brought to our police court every year, and of the criminals taken to the penitentiary.

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Most of this disease, and wretchedness, and crime is because people drink hard. But people are very different in this respect. There are some who drink a great deal and appear not to be harmed by it, though they may be injured without knowing it. Such cases may lead one to believe that there is not much harm done by drink. But that would be a great mistake. There are others who are badly injured by a small amount of drink.

The great danger of drink is because it is very alluring, and one so easily falls into the habit of drinking, a habit he may never break. To some people this occurs almost as soon as they begin drinking. They become slaves to drink without really being aware that they are so. This fact, and the fascination of drink, makes it one

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of the most dangerous things in the world.

Right here I want to speak to you about treating. This is done for good-fellowship and to give others pleasure. But it is more dangerous than anything else about the drink habit, because it leads to drinking too much. It has led to the death of thousands and thousands of people.

I hope no one of you will ever treat any one, or allow any one to treat you to an alcoholic drink. If you are about to do so just bring to your mind that, while your intention is giving pleasure, you may be leading one toward insanity, or crime, or death, and may be doing the same for yourself.

There is one thing I want you especially to understand; that is, how very harmful alcoholic drinks are to chil-

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dren. Those who take them are almost always duller and stand lower in their classes than others, and they do not develop so perfectly as they would have done otherwise. Alcohol is much more dangerous to the child than to one fully grown up, and more likely to cause sickness, insanity, or death. These facts are well known, so that the law generally forbids saloons to sell alcoholic drinks to children.

I want you to know some of the special advantages of not drinking. I suppose most of you know something of the late war between Japan and Russia, and how surprised the world was that little Japan should be victorious in every battle, and finally conquer the great country, Russia. These wonderful victories of the Japs were largely due to the fact that the Japs

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are a sober people, while the Russian soldiers are much given to drink.

Perhaps, also, you know something of college athletics and the great games between the colleges. When students are in training for these games they are allowed no alcoholic drinks.

There is another matter much more important I would have you know, that is, that many employers on railroads, in mines, factories, etc., will not employ men who use any alcoholic drinks. This is because there are now so many occupations requiring special skill, or special care for the safety of life or limb, and where those who drink cannot be trusted. The number of employers refusing to employ those who drink is constantly increasing, and the places they have to offer are among the best to be had. Therefore, if you

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wish, when you grow up, to make much of your lives, you must be careful not to spoil your chances by getting into the drink habit.

We learn more about alcohol every day. Not very long ago alcoholic drinks were supposed to be necessary to keep up strength and protect from cold. We now know it does not protect from cold, but adds to the danger. In polar expeditions, where cold is extreme, they do not permit any alcoholic drinks.

I tell you this so that you may understand that you have been taught something to-day not taught to your parents when they went to school, and may take something home which will be a help to you all.

Now, I want you to understand how most men come to drink. Usually it

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is because they are led to it. They see others drink. They see others go into the saloon. They believe it is manly because others do so, or they are asked to drink and are ashamed to refuse.

I wish I could make you see that it is often manly not to drink, that it is often manly not to go into a saloon.

I wish I could make you see that it is cowardly to do what is wrong just because you see others do it, whether that be drinking or what it be; that it is cowardly to do what is wrong just because you are asked to do it, and are ashamed to refuse.

I want you to know that it is an act of courage to say no when you should say no. He is a hero who does what he thinks is right, even though others do otherwise, and ask him to do otherwise. He is a coward who is afraid

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to say no, who does what is wrong because he sees others do it, or is asked to do it, and is ashamed to refuse. I want each of you to try to be a hero, and not a coward.

TALK IV

THE ORIGIN OF LIFE

I AM going to talk to you to-day about the origin of life—that is, how living things come into being. In many ways plant life, animal life and our own life are alike. I will speak first of plant life.

Plants breathe just as we do, they breathe with their leaves. They eat as we do. Their roots take food from the earth, and their leaves take it from the air. Plants also reproduce themselves—that is to say, have young plants—just as animals and human beings do. The organs by which they reproduce themselves are called repro-

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ductive organs. The same organs in animals and human beings are called reproductive organs. I am going to speak about the reproductive organs.

The plant grows from a seed. If you know how to open and examine a seed, you will see in it some tiny leaves, and tiny roots, and some food for them to feed upon until the roots can dig down into the earth and the leaves grow into the air, and they find their food in earth and air.

So the plant not only grows from the seed, but it is already in the seed; the whole idea of the future plant is there, even though it grow to be a mighty forest tree.

Now, where does the seed come from? Did you ever carefully examine a flower? If not, I hope you will some day have occasion to do so,

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for there is nothing more beautiful or more interesting.

Every flower contains one or both of the necessary parts of the reproductive organs, which we will call the mother and father part.

The mother part is usually in the depth of the heart of the flower. It is called the ovary. It contains tiny seed, out of which the full-sized seed finally grows. Small as this seed is, it already has in it the whole idea of the plant from which it sprung; but, nevertheless, it can never grow beyond its present state unless it is assisted. It must be fertilized by something in the father part of the reproductive organs. This we term pollen.

The pollen consists of very minute grains, the essential parts of which are so small that they can be seen only

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with a microscope. Yet, small as they are, each one contains in itself the whole idea of the plant from which it grew.

The pollen element cannot grow by itself, but if it unites with the mother seed, the two soon grow into the full-sized seed with the plant inside it, of which I have already spoken.

The plant that comes from this seed has the qualities of both the plant from which the mother seed and that from which the father pollen came. If the one came from a red flower and the other from a white flower, the resulting flower is likely to be red and white. We speak of this as heredity, that is, every plant, and animal, and human being has qualities of its parents.

Heredity is very important to the human being. Every individual

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should know that as he is growing, he is all the time growing in health and character. He is all the time getting more or less good health or more or less bad health, more or less good character or more or less bad character, and some day he is likely to give these good qualities or these bad qualities to his children.

Now I want to tell you how the pollen and mother seed get together. In some plants the two are in the same flower and near together, and the pollen grains fall into the seed in the ovary. In some plants the pollen is carried by bees or other insects as they sip the honey from the flowers. In still others the wind carries the pollen from flower to flower.

Now let us see how this is done in the animal kingdom. We will first

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consider the fish, that live in the water. Here the mother part, the ovary, is inside the mother fish, and the father part, corresponding to the pollen, is inside the father fish. In the spring the father and mother fish select a spot on the ground under the water and clean it well, making a kind of nest of it. Here the mother fish deposits her eggs, upon which the father fish pours his fertilizing fluid. The two unite and grow into life, and we have the young fish.

I want to tell you one thing more about reproduction in plant and fish. In the mother ovary of the plant there are usually many seeds, and in the father part there are pollen grains beyond number. The air is sometimes full of pollen dust, which has been blown by the wind from tree and

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flower. Most of these pollen grains are lost, and it is only because there are so very many that some of them are sure to find the seed within the ovary.

It is the same with fish. The mother fish lays a countless number of eggs, and the father fish pours a countless number of fertilizing elements upon them. Most of these are washed away in the water, and it is only because of their enormous number that some are left to grow into living fish.

Now let us consider reproduction in birds. You know the mother bird lays its eggs in a nest. Now I want you to note two things: firstly, there are only a few eggs, and it is, therefore, necessary that the most of them should be fertilized, otherwise birds would soon cease to be; and, secondly, when the

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egg is laid it is already covered with a hard shell, so that it must be fertilized before this time. For these reasons the father bird puts the fertilizing element inside the mother bird, where it can find all the eggs, and do so before the shell is formed.

Now, when we come to higher animals and to human beings, there is only one other condition I wish to note, that is, that while the bird lays its eggs and sits upon them until they are hatched into living birds, in the higher animals and human beings the egg remains inside the body until the young is fully formed, and then it is born a living being.

You must understand from what I have told you how important are the reproductive organs. Without them there would be no new life, and soon

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all plants and animals and human beings would disappear from the earth.

The reproductive are, therefore, the most important of all organs. In ourselves we should look upon them as almost holy. Nature punishes any disrespect to these organs as she punishes scarcely anything else. I must tell you different modes of disrespect to these organs, so that you may shun them, and do right by yourselves.

Firstly, it is supremely important that these organs should not be handled further than cleanliness and ordinary needs demand. Playing with them is the height of disrespect, and harmful in the highest degree. It degrades the individual, weakens character, and often leads to nervous disease.

Another mode of disrespect to the

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reproductive organs is constantly speaking about them. There are many men and boys whose mouths are foul, who delight in saying foul things. I would not have you associate with that kind. If you know a boy accustomed to say foul things, keep away from him.

It is more harmful, both for your morals and your health, to have foul thoughts. Do not keep your thoughts on the reproductive organs, but upon your work, and your studies, and your play. I wish I could make you see how harmful it is to cherish impure thoughts. It leads to secrecy and secret modes of thought. It is not only bad for the morals, but, in time, it is almost sure to harm the health, often to destroy it.

Another mode of disrespect to the

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reproductive organs is living immorally. Nature punishes this very bitterly indeed. Such immoral acts lead to the worst diseases in the world. Some of them destroy health. Some destroy life. Some cause insanity. Some have the effect that in future years a man destroys the health of his wife and children. They are diseases to be dreaded beyond all others.

Many boys and men have shown these different modes of disrespect to the reproductive organs because they never have been informed how fearful was the punishment that followed. I have informed you of these things to help you to keep your own lives pure and to keep yourselves from harm.

Just a few words more. Each of you who has a mother or a sister doubtless loves her. But, more than

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that, you must wish that every boy and man should have great respect for her. Therefore you should have great respect for every woman. Respect for woman is one of the best and most admirable qualities of manhood. Only one who has this quality is a really fine man. I want each of you to grow up a fine man, and to have respect for woman above all else.

With the possible change here and there of a word or a sentence, these talks are reproduced as they were given. The logic is not always the best, nor the mode of expression the most admirable; but logic has no great meaning to a child, and my only object was to bring out the vital points, trying, at the same time, to do no harm.

My impression is, that the fourth

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talk meant more to them because of the former ones—these had been given at intervals of weeks or months—either because they felt that they knew me, or because they had come to expect something that would be helpful to them. In this fourth talk one could at first see a furtive or self-conscious smile appear here and there, but soon this seemed to be lost in the absorbing interest of the subject.

I have reported these talks with the hope of stimulating others to make like efforts; and have given them in full because—this applies especially to the fourth talk—it was so hard for me to decide what I ought to say, and I would have been glad indeed to have found what another had said for my guidance.

It is possible that what I said to the

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boys in this "sex talk" will suffice. At least I believe the fewer words used in giving them the necessary knowledge the better, as their minds should be led to dwell upon the subject as little as possible. Girls should certainly have much more instruction. Probably there is less danger of injury from their thoughts, and they need more instruction to safeguard their own lives.

Just a word as to what the teachers believe has been accomplished in this instance. In the case of the girls this is due mainly, if not altogether, to Dr. Crotty's instruction. I would recall again the environment from which these children came, and the probable conditions that led the teacher to make application for special instruction.

Firstly, a purer atmosphere; no

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more furtive smiles and secret messages, and cliquing, especially of older and younger pupils, to arouse and gratify forbidden curiosity, but frank countenances and open ways. As their teacher expressed it, there was no curiosity, because their natural desire for knowledge had been rightly satisfied.

Then, again, the girls have a new sense of self-respect, and have also improved in appearance, in care of their persons and all, while both boys and girls have entered into new confidential relations with their teachers.

Possibly the best proof of a change in the boys was their refusing to associate with a new pupil who tried to pass around some improper literature, a kind which formerly had free circulation in the school.

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A number of mothers, both white and black, came to the school to express their thanks and gratification for what had been done for their daughters. One father came also. He said his daughter had become an altogether different girl.

The teacher said, and doubtless rightly, that in this course of instruction the word of the physician would count for more than that of parent or teacher, because of the traditional respect for both his position and his knowledge. She also expressed the opinion that not only good had been done, but that good results would continue. The fact that new ideals appear to have been created, ideals that permeated the whole class, speaks well for the correctness of this opinion.

Doubtless this course of instruction

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would have had a more profound influence if begun at an earlier age, especially if done by parents well fitted for it. He is indeed a parent in the truest sense of the word who says to himself, "This is my duty. I will teach my child." Perhaps the tendency of such a parent would be to say to the school, "Hands off." But he should bear in mind that there are few like himself, that the danger to his child is from its associates, and that it is, therefore, almost as important to his own child as it is to the others that there be moral instruction in the schools.

TALKS TO COLLEGE BOYS

TALK I

SEXUAL PHYSIOLOGY AND HYGIENE

IN a recent address President Eliot of Harvard said that college-bred men almost universally desire to be serviceable to the community, and that none but the eminently serviceable man can rightly be called successful.

Still more recently your own president, Dr. Dabney, said that education has to do with the whole life of the people, not merely with the so-called intellectual life, that the school aims

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to promote health and morals, as well as knowledge and power.

These two thoughts, promotion of health and service to others, form the basis of what I have to say to you to-day.

There was a time when the chief purpose of University training was supposed to be self-culture. Fortunately that time is past. It is now universally conceded that the opportunities and privileges of college education not only confer benefits upon the recipient, but also give him responsibilities.

He owes it to the masses of men, through whom, in a manner, his opportunities have come to him, to return to them something of what has been given him.

There should emanate from him the

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spirit of culture, giving life greater fullness and higher meaning. He should become a center for the diffusion of knowledge, and can rarely do a greater service than in teaching the lesson that I am to give you to-day, a lesson that touches very closely both the health and the morals of men.

Our subject is sexual physiology and hygiene and social disease. As we will deal largely with disease I must tell you different modes in which the presence of disease, or even its description, may affect the mind of the spectator.

To the physician the presence of disease is a call for service. His emotions may be aroused, but not unduly so. His sympathy is but a spur to action, and the frequency of these calls upon him not only adds to his useful-

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ness but also strengthens his character.

Another mode in which the presence of illness affects the mind is by filling it with emotions, sympathy, pity, sorrow, tears. If this be a frequent occurrence and never eventuates in service, its tendency is to weaken character, and make a sentimental, selfish, weakly being.

A third mode in which the presence of illness affects the mind is especially harmful. It arouses morbid fear, an inner sense of shuddering horror. It fills the heart with the fear of the disease itself, or with a nameless fear of one knows not what, a fear that tends to destroy nerve vigor and rob one of nervous health.

It is to warn you of this danger, and to protect you from it, that I have

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been making these preliminary remarks. I do not want such fears to enter into the heart of any one of you. There is no need of it. You must be, like the physician, forfended from such dangers by the call of duty. You are made the custodians of knowledge for the purpose of service. Your responsibilities, like your opportunities, are great. There must be no room in your hearts for fear.

The first lesson I wish to impress upon you in connection with sexual physiology and hygiene, is the danger from the quack and his advertisements. We will begin by considering some conditions which give the quack his opportunities of harm.

The most important of these is the bad habit, unfortunately very common, spoken of as onanism, or masturba-

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tion, or self-abuse. This habit not only debases the individual, and tends to rob him of self-respect and manliness, but also is a great factor in predisposing him to nervous disease.

Most commonly it is taught to the young by those who have already acquired it. When such cases finally come to the physician, and they do so in countless number, they usually make the bitter complaint that they had never been informed of the harmfulness of this habit, otherwise they never would have practiced it. This fact, and the further fact that once they have been thus informed the great majority break it off altogether, tell what an imperative duty it is to teach the young of its danger before the habit is contracted. Such teaching, if

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wisely and tactfully given, usually acts as a preventive.

I will add a few words on the treatment of self-abuse, that is, treatment for the purpose of removing its ill effects and protecting the individual from resuming the habit. This treatment consists, firstly, of all that tends to invigorate health, such as baths, abundant exercise, especially outdoors, and avoidance of stimulating food and drinks. The treatment consists, furthermore, of what favorably influences the mind—mental occupation, so that the mind does not dwell on self, and especially the effort to keep the thoughts pure. To succeed in the latter, it is well to keep away from individuals whose chief delight is the expression of impure thoughts.

Right here I would like to urge

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upon all of you to use your influence to build up a sentiment that pure thoughts are an expression of manliness, and that abandonment to the expression of impure thoughts is bad form.

Quite recently, in one of our American cities, memorial exercises were held in behalf of one of the greatest physicians and scientists of this generation. It was said of him that his heart and mind and spoken words were as clean as a little girl's. It is such men that the young man would do well to emulate.

We will next consider a common condition often falsely looked upon as pathological. I refer to seminal emissions occurring at night in sleep, spoken of as nocturnal and seminal emissions, and wet dreams. Such dis-

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charges occur in normal individuals, and must be looked upon as physiological. But they may become pathological through their frequency and their exhausting effects upon the individual. This is likely to occur in those who have practiced self-abuse very much.

The treatment of this condition when it becomes pathological is very much like that of the habit of self-abuse, that is, baths, exercise, occupation, abstaining from stimulants and, especially, pure thought.

Usually such treatment will suffice. Occasionally it may be well to consult a physician, especially if one is worried much about himself. Worry is really the most important element in these cases. It is this that drives them into the hands of quacks, a matter

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which I wish you to thoroughly understand.

Quackery in medicine is one of the crying evils of the present day. Few even among physicians knew of the magnitude of this evil in America until the recent exposures made by Samuel Adams in the pages of *Collier's*. There is, perhaps, no class in which quacks find prey so easily, nor to whom they do greater harm, than that we have just been considering, the young who have practiced self-abuse, or who are worried by seminal emissions.

The following is a not uncommon history of such a case. To one who has practiced self-abuse, the thought comes that he has harmed himself, a thought to which pangs of conscience may give added force. Then the ap-

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pearance of seminal emissions, over which he has no voluntary control, is likely to strike terror into his heart for the very reason that his condition seems to have passed beyond his control.

And now begins a period of watching and brooding and worrying, as a basis for which is his utter ignorance. His mind is centered on self. He studies every phase and watches every change in himself. He sees menace or danger in a thousand things which are altogether normal, or of insignificant value. His mental state has become a lamentable one, and is charged with all possibilities of harm. His anxiety and fear rob him of all joy in life, drive him to distraction, and not rarely to suicide.

The state of mind I have been de-

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scribing has usually developed and been maintained in secrecy. Native modesty, mortification, perhaps fear of censure, have led him to lock up all these thoughts and fears in his own heart. He has been fighting the greatest fight of his life solitary and alone.

Yet he wants help and wants it badly. He may make appeals darkly to his elders through veiled allusions. If so, his appeal may have been turned away by the latter because of their repugnance to speak of such matters, a state of mind which is very common, or he may have met with an ignorance as dense as his own.

It is now that he turns to the quack for help, for his circulars or advertisements are almost sure to catch his eye, and they seem to meet his needs. They describe his case, as there is

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scarcely a symptom, that well or ill can feel, which is not mentioned, and it is indicated that one who has any of these symptoms is certain to be lost unless he uses the quack's remedies.

These descriptions not only cover every case, but as a rule it was the reading of them that first gave the poor victim the idea that there was something wrong with him, an idea which beginning self-observation and brooding soon give the force of an obsession. In other words, it is the quack himself who is the cause of the fears, of the frantic mental state, on account of which the victim finally seeks him as his means of salvation.

The utter shamelessness of these people is shown by their treatment of confidential communications. The young man confides to them what to

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him is almost sacred, the deepest secrets of his heart. He does so on the promise of secrecy. But, instead, his words, written with his heart's blood, are made a matter of barter and sale. After they have bled him as much as is in their power, they sell his communication to others, who, in their turn, send him their circulars, in the hope of drawing him into their nets. Exchanges are formed to buy these confidential letters and sell them to others, and so the same letter and same victim are bandied from hand to hand. A single broker of this order had three million letters which he sold to advertising quacks at regular syndicate prices.*

And what of the victim who has passed through these hands? In some

* See President Hall's "Adolescence," Chapter VI.

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instances, fortunately, the symptoms disappear and the case is ended. This should have been true of practically all of them, if handled wisely and honestly, or, rather, there should never have been a case, for there was no good reason for it.

I do not mean by this statement that the self-abuse, in itself, has done the patient no harm, for it often injures him very much, especially is this true of so-called mental masturbation.

But the fact I wish to bring out is that, in the cases we have been describing, the symptoms are largely due to the fears and worry of the patient, for which, oftentimes, the quack is altogether responsible. And not all of these cases have been given to immoral practices. Some of them were altogether innocent, but fears were

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aroused, very likely through reading quack literature, and the development of the symptoms just described followed.

In the larger number of these cases, I mean those that have fallen into the hands of quacks, the symptoms do not so readily disappear, but, on the contrary, increase, the patient's condition grows worse, and his aims in life, or life itself, may be blasted.

Here is one great opportunity for you to do service for others. The number of sufferers is large, and you, through knowledge and sympathetic insight, may be the means of salvation to many, otherwise utterly shipwrecked.

I wish to speak of quackery only in so far as it is related to our present subject. But there is one other way

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in which it touches us here, that is in the treatment of social disease, syphilis and gonorrhea. When an individual has contracted one of these diseases it is of the greatest importance, both to himself and to others, that it be altogether eradicated from his system. It is just here that the quack does incalculable harm, for his methods lead to inadequate treatment, and to the belief that the disease is cured, while it is still lingering in his system, with its infinite possibilities of harm.

Another important matter in sexual hygiene, that must engage our attention, is continence. There is an idea prevalent among young men that sexual indulgence is necessary for the preservation of health, that continence is harmful, an unfortunate idea that is as erroneous as it is destructive.

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A very extensive experience of athletes, scholars, priests, and others, proves that this idea is altogether untrue. Many medical organizations have passed resolutions declaring continence not harmful to health. They have done so for the purpose of removing this false idea from the minds of young men, an idea which has led them to do themselves endless harm.

Continence is the only sure safeguard from the venereal peril. The value of injections of medicines and other measures suggested for protection has been proven to be illusory. They are more likely to do harm than good.

In order to emphasize the truth that continence is not harmful, it is well to bear this other truth in mind, that everywhere in the animal and vege-

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table kingdom too early functioning leads to weakness and decay. This is especially true of the sexual function in man. Its early and excessive use leads to its weakening or loss at a comparatively early age.

It is well, too, for man to bear in mind the dignity of the reproductive function, that it is the most important function in nature, and to learn to look upon his own person as almost sacred so far as it is the repository of this function. But I would especially impress upon you how much continence counts for character and manliness. Continence means self-control, the very basis of character. It means, too, to honor womanhood, than which there is no greater proof of manliness.

TALK II

SOCIAL DISEASE

THERE are two chief social diseases, well known to the public, gonorrhea and syphilis.

The first has very commonly been looked upon as insignificant, as one in which there is little to fear, while the gravity of the other has been well recognized, so that it has, indeed, been a dread disease.

But we know to-day that gonorrhea is a far greater curse to mankind than syphilis. When it occurs in the young man, the symptoms are likely to disappear after some weeks of suffering, but yet it may have grave results for

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him. Very frequently it robs him of all power of procreation so that he can never beget children. Not rarely it leads to stricture—which may cause indescribable suffering and torment—and to inflammation of the bladder and kidneys, and a fatal termination.

The gonorrheal poison often gets into the blood and produces some of the worst forms of rheumatism, inflammation of the heart and of the brain, and other diseases.

So gonorrhea is really a serious disease even to the male, but to know what a dread disease it is we must study its effects upon children and women.

The great danger to children is blindness through inflammation of the eyes at the time of birth. If any of the gonorrheal virus gets into the eye

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it produces violent inflammation and is likely to cause destruction of the organ and complete blindness. This happens not rarely to those who have the disease, from careless handling, but it most commonly occurs in the new-born. Eighty per cent. of blindness among children is due to gonorrhea and, if we take all cases of blindness there are both in children and adults, we find that one-fifth of them are to be attributed to this cause.

In women the danger is to the pelvic organs, that is, the organs peculiar to women. The poison of gonorrhea acts more insidiously here than it does in the male, and is likely to produce inflammation of all the pelvic organs.

Disease of the female organs is very common. It causes great suffering, often life-long invalidism, and fre-

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quently requires surgical operation, even the removal of all the female organs. Such disease often leads to a fatal termination. In the majority of these cases the cause is gonorrhea.

A physician who devotes himself to the treatment of female diseases said there would be very little of such disease were it not for gonorrhea. Nothing tells more forcibly than this statement what a fearful scourge gonorrhea is.

The saddest part of the story I have yet to tell you, that is, that the victims are mostly innocent women, women who married their husbands with no forewarning of the suffering and danger that lay before them. In a manner the husbands were also innocent, for they were, also, unaware of the existing danger.

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The fact is that the poison of gonorrhea may remain in the male years after he is supposed to have been cured. The germ remains in the deep parts of the urethra where it may escape detection on the most careful examination and yet, at a later period, be aroused into active life and produce disease in the innocent consort.

This, then, is what every young man should know of gonorrhea, that the disease is not an innocent one for himself, that it is often fraught with danger and death. But even if this were not true, even if the disease were of as little consequence to himself as many believe, he should still bear in mind that in future years, when married to one who is more to him than all the world besides, he may, all unwittingly, be bringing her a poison that

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will ruin or take away her life, and may be preparing for his unborn child a life altogether bereft of God's sunlight.

Unlike gonorrhea, syphilis has always been a dread disease. It does not show its worst effects at an early period. These are likely to appear long after the disease was contracted, perhaps years after the patient had believed himself to be altogether cured.

It is true, here, as in cases of gonorrhea, that the man may infect his wife in utter ignorance of the fact that there is such danger. Very much more frequently—in fact this is a common occurrence—the syphilitic poison still in him leads to the death of his offspring before birth. If the child is born alive there is danger of its having the syphilitic disease and,

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either dying early, or carrying the disease in its system throughout life.

But the late dangers are not only to wife, and offspring, but also to the man himself. These late manifestations which may appear five, ten, twenty or more years after the disease was contracted, are termed tertiary syphilis. They consist chiefly of disease of the internal organs, lungs, heart, liver, kidneys, brain, etc. I will only speak of that phase of the disease with which my personal experience brings me into closer touch, syphilis of the nervous system.

In some of these cases there are tumors of the brain, producing headache and convulsions, and finally blunting or destroying the mind. In some there are attacks of apoplexy

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with paralysis and, sometimes, loss of speech. In others, the chief symptom is paralysis of the legs. In others, again, the chief symptom is mental impairment.

The two diseases due to syphilis that have attracted most attention from both the medical profession and the public are locomotor ataxia and paresis.

Locomotor ataxia is not uncommon. Its natural course is to progress slowly from a slight beginning and increase until the patient is altogether disabled. Not rarely it is very slow in progress, so slow that it seems altogether at a standstill, and the patient may continue for an indefinite time at his ordinary calling. The common symptoms of the malady are pains, growing disability, blindness and impairment

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of various other bodily functions. A fully developed case, blind, paralyzed and in agonizing pains, is one of the most distressing pictures one can imagine.

The story of paresis is still more lamentable. It is that of gradual loss of mind. Little by little one loses all his mental powers, memory, judgment, affection, moral sense, all that distinguishes manly worth. More or less paralysis accompanies the mental break-down. Not rarely, in these cases, the man, on account of his peculiar delusions, ruins his family financially before his condition is recognized. The disease terminates fatally, usually, in about three years.

Enough of this depressing story. I would rather have omitted it, but it is best that you should know some-

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thing of the disastrous effects of social disease.

What I have said to you to-day was for a double purpose. Primarily it was that this knowledge should help to preserve your own health by shielding you from some of the most loathsome and frightful diseases that afflict mankind. Knowledge should do this for you. That means abstinence. It means self-control. But it means, also, the upbuilding of a strong character and developing some of the finest qualities of manhood.

Yet, if this knowledge should achieve nothing more than to keep your own selves from harm, this course of lectures would not be all a success.

Social disease is widespread. It is the greatest menace of the modern world. Even tuberculosis does not

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compare with it in the harm that it does and the greater harm that it threatens. The medical profession is uttering a warning cry on every side that the human race be not wholly deteriorated through this evil. It is so widespread, and so greatly endangers mankind, because of the utter ignorance of the disease that prevails. Men and women do not know the dangers they are facing, nor those they may be spreading. For this reason members of the medical profession and others, interested in this subject, have recently been making strenuous efforts to lessen this ignorance by teaching people about social disease and its perils. They have instituted public lectures, given instruction to working people, and in many ways attempted to throw light in dark places.

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This work is Herculean. It calls for aid from every side. And here again is your opportunity for service. You should do your part toward disseminating this knowledge.

As I said to you at the beginning of this talk, there must be no room in your hearts for morbid fears. All these grewsome facts of disease and the knowledge of its fearful consequence should only awaken you to the crying need of others, and fire your hearts with courage and energy, and settled purpose.

PREVENTION OF SOCIAL DISEASE

THERE are no means of making an exact estimate of the degree of prevalence of social disease, but it is universally conceded that the disease is very widespread. It is a greater danger to the individual, the family and the state than any other ailment.

It not only enormously lessens the birth-rate, causes endless suffering and a great amount of fatality, but also is one of the great sources of degeneracy of the race. Furthermore it produces endless social misery and unhappiness, for it breaks up families, leads to divorces, and in many ways adds to the ills of society.

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A distinguished American surgeon said of it that social disease was sapping the foundations of Society, poisoning the sources of life, rendering existence miserable, and deteriorating the whole human family.

Measures for the prevention of the spread of the disease have often been instituted. These have been chiefly in the way of police regulations of prostitution. Such measures have accomplished little, and very frequently they have appeared to increase, rather than lessen, the extent of the disease.

The only measure which promises effective control is education. The essential factor for protection from disease is knowledge. We must be aware of a danger to know how to avoid it.

It is a striking fact that while in other diseases every effort is made to

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inform and protect the individual—for example, houses with contagious disease are placarded—just here, where such efforts would be of greatest value, an exactly opposite policy is pursued. Everywhere is the hush-word. There appears to be a concerted effort to conceal all knowledge—a very conspiracy of silence. The individual is kept in ignorance of the dangers that lie before him. This is due to many causes, but among them is the thought that these diseases are shameful, that the sufferer is justly punished for his sins.

This view entirely overlooks the fact that it is largely, perhaps chiefly, the innocent who suffer, the countless number of blind children, and wives who unwittingly enter into a life of suffering or death.

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It should be known, too, that this disease is often carried by soiled linen, by eating utensils, by means of a kiss, and in a thousand like modes through which a pathological discharge from one individual is brought into contact with the person of another. Especially physicians, wet nurses, and their charges, are subject to this danger.

The world is slowly awaking to the need of controlling social disease through educating the public. In the various countries of Europe and in America societies of national scope have been formed for the purpose of influencing public sentiment and diffusing necessary knowledge.

Lectures have been given in the army and navy, in factories to workmen and workingwomen, and to the

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general public. Pamphlets, in which the subject has been treated in ways which seem best for the classes among whom they are distributed, have been scattered widecast.

Such teaching should give sufficient knowledge of the social diseases to safeguard the individual. It should give sufficient information about the quack to protect men and women from the snares he is constantly placing at their feet.

It should remove the false idea so prevalent among young men that continence is harmful to health and, as a farther aid to inhibition, aim to inculcate deep respect for the reproductive organs.

Greater efforts should be made in the teaching of the female than the male, for her ignorance is denser, her

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needs greater, as are also the dangers that menace her.

This teaching, if well done, should do incalculable good in the lessening of disease, suffering and vice. But yet it will often come too late, often the harm will, already, have been done to character or mind or health.

Teaching these subjects to college boys appears to be an imperative necessity to safeguard their health and lives. Furthermore it may reasonably be expected that they will become disseminators of this knowledge and thus benefit others. The instruction should be given so as to do the most good, and the least harm possible, especially so as not to arouse morbid fears. The aim should be, instead, to inspire high ideals which ennoble life.

It is true of the college boy as of

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the general public, that the teaching will often come too late. To a degree this could be remedied by teaching the higher grade children in the public schools, as illustrated in the first article in this book, "An Experiment and Its Results." But much more than this should be accomplished by school instruction, a subject that must next receive our attention.

TEACHING SEXUAL PHYSIOLOGY AND HYGIENE IN SCHOOL

THE prurient mind deserves as much consideration as does social disease. There are few things more productive of harm.

It leads to masturbation, to illicit sexual indulgence and to prostitution, and often makes futile all our educational efforts to combat these conditions.

It cannot be stated too strongly that this is one of the most potent factors in the production of disease. Physicians are learning more and more what an enormous influence it has to weaken the nervous system. Many cases of

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hysteria, neurasthenia and mental disease are due chiefly to this cause.

There are few things in greater contrast than the pure and impure mind. The one counts for mental and physical health, the other for disease. The one helps the individual to throw off the million things in life that poison it, the other makes of the mind a sponge for this million things to soak into that it become poisoned.

The chief aim of the training and education of the young should, therefore, be to make a pure mind and prevent pruriency. But, in truth, just the opposite appears to be the concerted aim of society.

The young child has a curiosity to know something of the origin of life. Later on he feels in himself the first stirrings of sexual life, when whole-

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some habits should be formed and suitable knowledge imparted for his protection. Now, these demands and needs are met as a rule by absolute silence, and worse than silence, for about the whole matter is spread a veil of mystery which but stimulates the inquisitive mind. And withal knowledge comes to the child, and much perverted knowledge, from the companion of the gutter or other improper sources.

The result is but what is to be expected. The facts whispered to him have been obtained secretly; they are facts which, so far as his elders are concerned, always are received with the hush-word, and they naturally become associated in his mind not only with mystery, but shame. As these facts remain with him, and are dwelt

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upon in secret, and as there is so much in life that is suggestive, that arouses and intensifies sensual imagery, the tendency is to the production of a prurient state of mind, with its infinite possibilities of harm.

Instead of such training the child should be educated in such a way as to keep a pure mind. Such education should begin before the sexual idea has an emotional garb, and throughout it should be given in such a manner as not to arouse an emotional state.

The child should be taught that all life comes from a previous life, a course of instruction beginning with the lowest organisms and finally reaching to man. For instance, he can be carried from the idea of fertilizing flowers by insects to the fertil-

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izing of insects by each other, and so on until he comes to look upon sex as being as natural to a plant as to an animal. All the facts of reproduction can thus be brought naturally to the child's mind without shock or shame.

At the proper time children should be taught all further necessary knowledge pertaining to the physiology and hygiene of sex, those of each sex the facts pertaining to them. Further, they should be guarded from acquiring the vice of masturbation, and be instructed as to the most prevalent contagious diseases, among them syphilis and gonorrhea, without attaching shame to the diseases, though informing them of their great gravity, of their prevalence among those leading immoral lives, and of the danger of associating with the latter.

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The effort should be both in pathological and biological studies, while clearly presenting the facts of sexual life and of social disease, to give them no undue prominence so as not to arouse self-consciousness, nor lascivious thoughts. During all this time there should be instruction in what pertains to character, the value of home, the meaning of parenthood, the significance of heredity, always aiming to give them high ideals. At the same time they should be taught to have self-respect, taught that "the human body is the temple of the soul," and the boys should be taught to have a high regard for the honor of womanhood.

School instruction of this kind is still very much in the experimental stage. Little has been done. But

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that decided results may be obtained from the right teaching and the right teacher is clearly shown by the following abstract of an article by Dr. Helen C. Putnam:

“A year ago I spent two interesting months visiting public schools in twenty cities, searching for the teaching of hygiene. I found many instructors anxiously alive to the need of wiser efforts, especially to prevent vicious habits, but handicapped by popular prejudice and personal unpreparedness. I found a very few working admirably to this end, and doing it so normally that no pupils were startled, and no parents or authorities aroused to criticism and opposition.

“In one city of the Middle West I found three classes of boys and girls whose teacher is a good biologist.

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The children were sun-browned and vigorous from frequent excursions into the country to collect specimens on land and water. Their ages ranged from thirteen to sixteen. They used microscopes, drew and discussed what they saw, and kept careful note-books. They traced the development of the digestive system from the simplest to complex animals, and man; also the circulatory, nervous, and other vital systems, including the reproductive.

“They began seeing through the microscope the single-celled ameba divided into two amebæ. . . . Then they saw animals made up of many cells, such as the volvox, shaped like a cup, where certain cells fall from the sides into the cups, and grow into new cup-shaped animals that float up out of the top of the parent cup.

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Then they saw the hydra, a little more complex, something like a sac with tentacles around the top. This multiplies in two ways. In one, buds grow and fall off as new hydras. In the other they saw a bunch of cells called egg-cells, another called sperm-cells, which ripened, fell in the water, and the sperm-cells of one hydra united with the egg-cells of another, developing new hydras.

“In many other simple land and water animals they saw egg-cells, sperm-cells, hermaphroditism and external fertilization, all with slight modifications. They made similar studies in many kinds of worms, and more complex animals. The many devices for hatching eggs and protecting the young were especially interesting, through insects, mollusca,

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fish, frogs, reptiles, birds, and mammals. The whole was as fascinating as any fairy tale, and more wonderful. They begged for the privilege of working overtime and after school; and you will remember they were studying the other vital functions along with this. All were equally interesting.

“ Finally, the instructor gave them a talk on the sacredness and the meaning of home, and the importance for both boys and girls of right living for the sake of the home, reminding them of the heredity they had seen in their specimens. Living germs something like single-celled animals, as causes of several diseases, some carried by mosquitoes and other animal life, were discussed. ”

“ Social diseases were enumerated

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with the others, the social evil being merely mentioned as one of their sources, and their harm to many millions, including little children; all in the same scientific spirit as the study of injurious parasites under the microscope. All was received in that frank-eyed, truth-seeking spirit. Their interest had been wholesomely answered. Their understanding grew after nature's own fashion, a few new simple truths day by day. Both mind and character reacted healthfully.

“In several primary and grammar grades I found plant life studied with the same method. Few, except biologists, know how closely plant reproduction parallels animal reproduction; and how simple but fundamental principles of heredity, parenthood, physical integrity, care of the young and

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home responsibilities can be fixed in the impressionable mind and heart at these ages, anticipating vulgar misinformation, the cause of so many mistakes.

“Teachers, of course, must be as well prepared to teach the conditions of life as to teach the rudiments of mathematics. These schools demonstrate that there is time for this. We have but to substitute scientific, correct, well co-ordinated instruction by prepared teachers for the vague and often useless work now required from the already overtasked general teacher.

“Some of the results the teacher saw are significant. Perhaps the most encouraging was the clearing up of the faces of the unclean-minded children. The embarrassment, the drooping eyes,

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the furtive smile gave place to a frank, open face and earnest manner, and the teacher felt sure they had undergone a mental and moral change for the better."

MODE OF TEACHING

THE results of education in sexual physiology and hygiene and social disease depend almost entirely on the mode of teaching and the teacher. The best results can only be expected from the right mode of teaching and the right teacher.

The harm that may be produced must be kept as much in mind as the benefits that should accrue.

Firstly, there is the danger that knowledge, instead of having a deterrent effect, be suggestive in undesirable ways, that it give what it aims to bar—the alluring qualities of forbidden fruit. This may be true of

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bad habits and immoral acts, and true of the child as well as of those who are older.

The result will depend, largely, upon how the truths are brought to the child's mind. If that be done in a way to excite gaping attention and morbid curiosity it can scarcely fail to do harm. But if, on the contrary, the whole course of instruction tends to arouse an interest in nature and nature's methods, and aims furthermore to create respect for self, for family ties, and high regard for heredity, it will usually inhibit ill effects.

The mode of grouping the children when giving such school instruction may be a matter of moment. For young children and the usual biological teaching class instruction is natu-

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rally in place. Subjects tending to arouse sensual imagery must be treated with more caution. Individual instruction may be called for, or the children may be grouped according to their mental equipment, disposition and temperament.

Every effort should be made to present the subject so as not to arouse self-consciousness or lascivious thoughts. For this purpose instruction in social disease might be given in a course on hygiene, in which other contagious diseases are discussed, and their causes and dangers.

It has been suggested that the physical instructor, who strips, measures, and weighs the boy, should incidentally instruct and warn him.

The age when instruction should be given is a very important matter. It

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is fortunate if we need be guided only by the development and needs of the child, but commonly the conditions of the environment must be considered. The aim should always be to anticipate harm, and the child usually gets information—or misinformation rather—at an early age on the street, and often acquires bad habits early, and not rarely disease. We must remember, too, that one-half the children leave school before they are twelve or thirteen years old, so that what school instruction they are to get they must receive before that age.

Doubtless such instruction should usually be given verbally rather than by book or pamphlet. There is usually a great reluctance to speak to children on these subjects, and it is a source of relief to resort to the printed

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page. But the latter may be read in secret, and read and gloated over, and passed from hand to hand, and thus do great harm.

Possibly the greatest effort in this course of instruction should be to influence the pupil not to allow his mind to dwell upon these matters. In Dr. Crotty's lecture to schoolgirls, mentioned in "An Experiment and Its Results," she almost exacted a promise from them not to discuss these subjects with others and, as far as possible, not to allow their minds to dwell upon them.

A second source of danger from the teaching we are now considering, especially that of social disease, is fear. Fear is one of the most demoralizing forces of mind. It has been termed the protecting genius of the human

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body, but this is true only in so far as it provides means of defense. In this instance it would be by helping the individual to withstand the promptings of passion, and to maintain self-control.

Unnecessary and unwholesome fears are a source of endless harm. Fear plays havoc with the nervous system of old and young. Its ill effect on whole communities is seen in some of the acts of injustice and inhumanity perpetrated during the present campaign against tuberculosis.

The danger of arousing morbid fear is to be especially borne in mind when depicting the dangers of self-abuse and of social disease. I have already spoken of modes of teaching to inhibit its ill effects. Perhaps, too, something may be gained by giving

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an altruistic turn to the instruction. But yet, it is well to know the disposition of the pupils, for some of them should hear as little as possible of disease and danger.

THE TEACHER

THE parent should be the ideal teacher. After a few years of preparation with lessons of reproduction in plants and birds and the like, the mother might tell the story of mother and babies when the child is about eight years old, an age when it is especially curious, and when it is likely to get misinformation from its companions.

As the child gets older it should receive other necessary lessons at the appropriate time; for instance, the mother teach the girl about the menses, motherhood, social disease, and a pure mind; the father the boy about semi-

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nal emissions, self-abuse, continence, and social disease.

One great advantage of parent as teacher, is that the child is likely to make a confidant of him and not go elsewhere, when seeking information on these subjects, a benefit to the child which can scarcely be overestimated. For the child should be in confidential relations with some one to whom it turns freely for advice in such matters, and it is fortunate indeed if that confidant is a wise parent.

So clearly, the parent might be the ideal teacher. But for the purpose he must be wise and discreet, equipped with knowledge, understand and be in sympathy with his children, and be willing to do his duty by them.

Unfortunately this mental state of

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the parent is rarely found to-day. Mostly he has a peculiar reluctance to perform this duty, and just as often he is quite unfitted for the task.

This condition may change. Perhaps through educational efforts the parent will be prepared for this high function, but in the meantime the duty and the work devolve upon the school.

Whether teaching shall produce a pure or prurient mind, shall increase or lessen self-control, or fill the mind with morbid fears will depend to no small degree upon the teacher. The right teacher can do almost an infinite amount of good, while the wrong teacher will doubtless do harm. The general teacher already overcrowded, who is given a smattering of knowledge for the purpose of this teaching, can scarcely be expected to be just the

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right teacher. That calls for special fitness in temperament and understanding, as well as sympathy with the work. It usually calls, also, for special training, a large part of which should be in biology.

To-day there is nowhere training of this kind. It should be the function—and, really, one of the most important functions—of normal schools and universities.

Just a word about the physician as instructor in this department. His should be the function to instruct the public by means of lectures and pamphlets; and to prepare parents to teach their children. The latter might be done through individual instruction, or through lectures to parents. It should be his part, too, to teach college boys in such matters, as well as

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to give much of the instruction which is imparted in grammar and high schools.

If possible the physician should be selected for instruction wherever the personal influence of the teacher counts most, for the fact that he has special preparation and speaks with special authority, will give his words added force and power.

It is as important for the physician as it is for the teacher to be specially fitted for this work, fitted by temperament and interest and special knowledge. He may be fitted by special gifts, or special study, but, as a rule, it should be by special training.

The cardinal principle of both teacher and physician in this course of instruction should be that the teaching do no harm.

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There is a modern trend to bring into the school curriculum courses of study that more nearly prepare the pupil for his work in life. Prominent among these are manual training, domestic science, and civics. We would add, as most important of all, instruction in sexual physiology and hygiene.

With these additions to the curriculum there is danger of overtaxing the child, a common fault of the school before new work was added. The safety of the child demands a readjustment of his work with the omission of much or all that is unessential.

Another demand is that this new instruction be done by those thoroughly fitted for it. This often would mean a larger outlay of money, but people should fully recognize that

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what is spent to prepare a child for life is well spent, and what is well used for the purpose of character and health brings returns of priceless value.

AN ADDED WORD

IT should be clearly recognized how much the right teaching of sexual physiology and hygiene may mean for the individual and society, but not less important are certain supplementary efforts in training and education and life.

Sex education should begin in childhood, as the surest means of making a pure mind, which again is the surest means of future protection. But adolescence is the really dangerous period, dangerous because of the appearance of new instincts and passions, because of its ignorance and its temptations, and, especially, because excesses at this period are likely to

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weaken the highest functions and mar the whole future life.

This, therefore, is the period that should be specially safeguarded. Very much will have been done for this purpose if the training has been directed toward pure thoughts, and if sufficient knowledge of the dangers of bad habits and social disease have been imparted, especially if the training included the building of character, strengthening self-control, understanding heredity, great respect for self and to honor womanhood. It is almost axiomatic that this course of instruction must have greatest influence on the individual if it is universally imparted, for one's associates are a great power in molding one's character and giving the spur to action.

There is a great difference in indi-

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viduals. Not all will be equally safeguarded by this education. They vary in their natures, in their willingness to follow instructions, in judgment and prudence, in the extent to which fear inhibits and acts as a deterrent, and especially in the strength of passion and power of self-control. They vary greatly also, in the extent to which they are subjected to temptation.

We must, therefore, call to our aid all those additional safeguards which Nature herself supplies. Above all we must aim to lead youth to expend its nerve energies in safe channels, so that it can the more easily repress undesirable emotions and actions.

Calling into play the motor activities is one of nature's greatest safeguards. Herein is the great benefit of games and most forms of physical

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exercise. The great enthusiasm for athletics is a safety-valve of far-reaching effect, and while some of our games, as played to-day, are far more dangerous than they should be, their benefits far outweigh the harm done by them. On the other hand, sedentary occupations are, in these respects, not without danger to youth.

Strong intellectual interests keep the thoughts from dwelling upon self, while dull, listless work offers opportunities for the play of fancy and the stirring of passion. For these reasons it would appear that the recent tendencies in school education to direct the child's work into channels that better prepare it for its future life should be a help in the cultivation of purity of mind.

The young have a natural craving

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for excitement and the play of the emotions. If this be fed by arousing a glow of worthy sentiment—for beauty, truth, friendship, honor, heroism, religion—there will be less likelihood of awaking the sensuous.

Such efforts in training are very important. They are much more difficult and time-robbing than the teaching of sexual physiology and hygiene. The study of means by which desired results can be continuously attained is one of the highest, as well as one of the hardest, duties of the guardian of youth.

Youth is not the only period of life which needs safeguarding. Human nature is weak, temptation is near at hand, and social disease is an ever-present danger. Society itself must be held directly responsible for no small

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part of the evil wrought upon the individual. It may well be charged with grave and glaring faults.

Prominent among the latter is the tenement house as often found, and especially the crowded room, which takes away all privacy from life, and, almost necessarily, robs it of virtue.

Not less reprehensible is the starvation wage which so many young workingwomen receive. There has been a gradually increasing demand for female labor. The number now employed forms a goodly part of the community. Her pay scarcely more than meets her barest needs. She has naturally a craving for dress and ornament and pleasure, a craving but increased by her moving about in the world. What wonder with these longings, her inability to gratify them, and the

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countless temptations set in her path, that she frequently fails?

It is another grave fault of society that for many it makes late marriage almost compulsory. Few greater crimes can be charged against wealth and fashion than that they have gradually delayed the time of life when the young man can marry. There is no more crying need than that altered modes of society and economic needs, in other words a simpler life, should enable the young man to marry while he is still really young.

Perhaps alcohol should not be included in the same category of faults, but society must be held responsible for not more carefully regulating its sale and use. Alcohol lays many pitfalls for both men and women, and is directly accountable for much of

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the prevailing vice and social disease.

Correcting these grave faults of society would be no small step toward prevention of social disease. But for this we have long to wait.

On the other hand, there seems to be no reason why the right education of sexual physiology and hygiene should not be introduced and generally accepted. This should not only effect, in itself, a large part of the benefit for which we are now seeking, but should help to make a public sentiment that would compel the correction of these grave faults of society.

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